

**Remarks**

Entry of the above-noted amendments and allowance of all claims pending are respectfully requested. By this amendment, claims 1-4, 6-9, 26-27, and 31-32 are amended, claims 33-39 are added, claim 10 is withdrawn, and claim 5 is canceled. These amendments to the claims constitute a bona fide attempt by applicant to advance prosecution of the application and obtain allowance of certain claims, and are in no way meant to acquiesce to the substance of the rejections. Support for the amendments can be found throughout the specification (e.g., page 8, line 10 to page 10, line 12; page 11, lines 13-20), drawings (e.g., FIG. 1), and claims and thus, no new matter has been added. Claims 1-4, 6-10 and 25-39 are pending.

**Claim Election/Restrictions**

The Official Letter states (section 1):

"However, claim 10 is withdrawn from the prosecution because a capacitive sensor 306 is cited in FIG. 3 that has not been elected."

Applicant has withdrawn claim 10 to advance prosecution.

**Claim Rejections - 35 U.S.C. §§ 102 and 103**

Claims 1-4 and 25 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Othman et al. (XP-002057214; "Othman"). Claims 5-9 and 26-27 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Othman in view of Toyoshima et al. (U.S. Patent No. 6,634,230; "Toyoshima"). Claims 28-32 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Othman in view of Toyoshima and further in view of Beguin

et al. (U.S. Patent No. 5,919,383; "Beguin"). These rejections are respectfully, but most strenuously, traversed.

Applicant respectfully submits that the Office Action's citations to the applied references, with or without modification or combination, assuming, *arguendo*, that the modification or combination of the Office Action's citations to the applied references is proper, do not teach or suggest the heating element that cooperates with the first elongated beam to cause one or more drive oscillations of the second elongated beam, as recited in applicant's independent claim 1.

For explanatory purposes, applicant discusses herein one or more differences between the claimed invention and the Office Action's citations to Othman, Toyoshima, and Beguin. This discussion, however, is in no way meant to acquiesce in any characterization that one or more parts of the Office Action's citations to Othman, Toyoshima, or Beguin correspond to the claimed invention.

Othman (page 729, left column, Excitation) discloses:

Mechanical excitation of the beam is produced by the thermal expansion of the polysilicon resistor produced when it is heated by passing an electric current.

Othman discloses excitation of the beams by thermal expansion. Othman fails to disclose the heating element that cooperates with the first elongated beam to cause one or more drive oscillations of the second elongated beam.

So, the Office Action's citation to Othman fails to satisfy at least one of the limitations recited in applicant's independent claim 1.

Toyoshima (column 4, lines 46-57) discloses:

In the above-described vibrating gyroscope 1, the supporting members 8 and 9 are located in close proximity to the node axis n1 at the positions of the proximity portions 14. The

supporting members 10 and 11 are located in close proximity with the node axis n2 at the positions of the proximity portions 14. Accordingly, the supporting members 8 through 11 are configured such that they support the vibrator 2 in close proximity to the node axes n1 and n2. Thus, leakage of the vibration of the vibrator 2 to the exterior is greatly decreased, and the vibration is stable, thereby greatly improving the detection precision of the angular velocity.

Toyoshima presents the decreased vibration leakage as an advantage for greatly improving detection precision of angular velocity. Toyoshima repeatedly discloses supporting members configured to decrease leakage of vibration of the vibrator to the exterior (e.g., column 1, lines 39-41; column 1, lines 47-50; column 4, lines 46-57; column 6, lines 13-16; column 6, lines 21-25; column 7, lines 33-36; column 7, lines 40-45) and thus teaches away from causing drive oscillations in a second elongated beam. Toyoshima fails to disclose the heating element that cooperates with the first elongated beam to cause one or more drive oscillations of the second elongated beam.

So, the Office Action's citation to Toyoshima fails to satisfy at least one of the limitations recited in applicant's independent claim 1.

Beguin (Abstract) discloses:

A package for a temperature sensitive optical component (20) includes inner (14) and outer (12) containers of low thermal conductivity plastics material, a foam insulation (18) being situated between the two containers. Within the inner container (14) are a thermally conductive plate to which the component (20), a temperature sensitive resistor, and a resistive heating element are affixed. A temperature compensating circuit (16) is located outside the inner container. The temperature sensitive resistor is part of a Wheatstone bridge at the input of the circuit (16), whereby the circuit compensates for variations in operating voltage. The output transistor of the circuit regulates the current through the resistive heating element in response to variations in the resistance of the temperature sensitive resistor. This transistor extends into the inner container (14) and is in contact with the thermally conductive plate, whereby heat from the transistor is dissipated into the plate.

This maintains the temperature of the transistor substantially constant.

Beguin is directed towards optical components and does not disclose elongated beams. Beguin discloses a single temperature sensitive resistor as part of the Wheatstone bridge for maintaining the temperature of the transistor substantially constant. The other resistors of the Wheatstone bridge are constant, as shown in Table 1. Beguin fails to disclose the heating element that cooperates with the first elongated beam to cause one or more drive oscillations of the second elongated beam.

So, the Office Action's citation to Beguin fails to satisfy at least one of the limitations recited in applicant's independent claim 1.

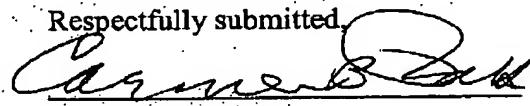
The Office Action's citations to Othman, Toyoshima, and Beguin all fail to meet at least one of applicant's claimed features. For example, there is no teaching or suggestion in the Office Action's citations to Othman, Toyoshima, and Beguin of the heating element that cooperates with the first elongated beam to cause one or more drive oscillations of the second elongated beam, as recited in applicant's independent claim 1.

For all the reasons presented above with reference to claim 1, claims 1 and 35 are believed neither anticipated nor obvious over the art of record. The corresponding dependent claims are believed allowable for the same reasons as independent claims 1 and 35, as well as for their own additional characterizations. For example, claim 6 recites that the heating element oscillates the first elongated beam to stress the transverse beam to cause the one or more drive oscillations of the second elongated beam. In another example, claim 28 recites the plurality of feedback components arranged in the Wheatstone bridge.

Withdrawal of the §§ 102 and 103 rejections is therefore respectfully requested.

In view of the above amendments and remarks, allowance of all claims pending is respectfully requested. If a telephone conference would be of assistance in advancing the prosecution of this application, the Examiner is invited to call applicant's attorney.

Respectfully submitted,



Carmen B. Patti  
Attorney for Applicant  
Reg. No. 26,784

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CARMEN B. PATTI & ASSOCIATES, LLC  
Customer Number 32205